

Notice of Proposed Action

The Administrator of the Motor Vehicle Administration proposes to amend:

- (1) **Regulation .01-1, .04, .07, .14, .20, .21, .24, .26, .28, .29, and .31 - .33** under **COMAR 11.19.02 - Type I School Vehicles — Construction Standards**; and
- (2) **Regulation .02, .08, .19, .23 - .26, .28 - .30, .32, .33, and .38** under **COMAR 11.19.03 – Type II School Vehicles — Construction Standards**.

Statement of Purpose

The purpose of this action is to amend regulations for Fire Safety Standards for School Buses to conform to Senate Bill 369, Chapter 453, Acts of 2011. These amendments require all school buses procured after January 1, 2014 to conform to the new fire safety standards for school buses. Also, this action updates and makes technical manufacturers corrections to Type I and Type II school vehicle inspection regulations.

Title 11 DEPARTMENT OF TRANSPORTATION

Subtitle 19 MOTOR VEHICLE ADMINISTRATION — SCHOOL VEHICLES

Chapter 02 Type I School Vehicles — Construction Standards

Authority: Transportation Article, §§11-173, 12-104(b), and 25-110; *Education Article*, §7-808, Annotated Code of Maryland

.01-1 Incorporation by Reference.

A. (text unchanged)

B. Documents Incorporated.

(1) — (25) (text unchanged)

(26) 49 CFR §571.302 Flammability of interior materials, as amended. *Repeal effective January 1, 2014 pursuant to Chapter 453, Acts of 2011.*

(27) — (28) (text unchanged)

.04 Brakes — General, Hydraulic, Air Brake.

A. (text unchanged)

B. Hydraulic.

(1) — (6) (text unchanged)

(7) A drive-line type parking brake shall [be either 10 inches by 3 inches, 11 inches by 2 inches, or 12 inches by 3 inches with] *have a* conveniently mounted control [handle] to apply and release.

(8) — (9) (text unchanged)

C. (text unchanged)

.07 Exhaust System.

A. The exhaust system shall include the:

(1) (text unchanged)

(2) Piping leading from the flange of the exhaust manifold, to and including the muffler or mufflers and[tail pipe or] *exhaust pipes*.

B. (text unchanged)

C. [Tail Pipe or] *Exhaust Pipes*.

(1) The [tail] *exhaust* pipe [or pipes] shall be of nonflexible 16-gauge steel [or its equivalent, except for rear engine vehicles]. *An Original Equipment Manufacture flexible pipe or its equivalent not longer than 24 inches in length may be used at the front of the system at or near the turbocharger.*

(2) The [tail] *exhaust* pipe shall exit the rear of the bus on either the left or right side of the emergency door.

(3) The [tail] *exhaust* pipe may not exit through or be attached to the bumper.

D. — F. (text unchanged)

.14 Tires (Wheels and Rims).

A. New tires of [good quality and] proper size and ply rating commensurate with the chassis manufacturer's gross vehicle weight rating shall be provided. All tires on any given vehicle shall be the same size and ply rating.

B. — C. (text unchanged)

.20 Color and Identification (Lettering).

A. (text unchanged)

B. The following lettering is required and shall be block type:

(1) (text unchanged)

(2) The words "EMERGENCY DOOR" or "EMERGENCY EXIT" shall be 2 inches high [by 3/8-inch wide] black lettering and shall be applied *at the top of, or directly* above, the *emergency exit* door and *above* the emergency push-out windows on the inside and outside of the vehicle. If the outside areas above the door or the upper door window are not large enough for the words, the words may be placed on the door under the upper window.

(3) — (4) (text unchanged)

(5) If applicable, the name of the local school system shall be on both sides of the vehicle, properly centered, in letters 6 inches high by [1 inch] *3/4 inch* wide.

(6) (text unchanged)

C. The following lettering may be used, if required or desired:

(1) ICC number (to rear of entrance door 2 1/2—3 inches high by [1/2 inch] *1/4—1/2 inch* wide);

(2) Address of owner (to rear of entrance door 2 1/2—3 inches high by [1/2 inch] *1/4—1/2 inch* wide);

(3) Telephone number of owner (to rear of entrance door 2 1/2—3 inches high by [1/2 inch] *1/4—1/2 inch* wide);

(4) (text unchanged)

D. Only signs and lettering approved by State law or regulation and any numbers necessary for identification shall appear on the vehicle. Bumper stickers are not permitted. *The fleet number may be on the front bumper.* All lettering shall be located according to the diagram and shall be block type.

E. — J. (text unchanged)

.21 Electrical (Body) — Lamps, Signals, Reflectors, and Fuses.

A. — B. (text unchanged)

C. Back-Up Lights. Two back-up lights shall be installed to be activated when the gear shift lever is placed in reverse position. Lights shall be not less than [a nominal] 4 inches in diameter with a minimum of 32 candlepower and mounted above the bumper and below the window line.

D. Clearance, Side-Marker, and Identification Lamps. Two red clearance lamps on the rear and two amber clearance lamps on the front shall be mounted as high as practical on the permanent structure of the school bus to indicate extreme width. Two side marker lamps, amber at the front and red at the rear, shall be mounted on each side of the bus. Three red identification lamps shall be mounted on the same level not more than 8 inches apart in the center rear of the body as high as practical, and three amber identification lamps shall be likewise mounted in the center front of the body. Recessed [identification cluster] lights [in the front and rear] are permitted.

E. — I. (text unchanged)

J. Switches.

(1) — (2) (text unchanged)

(3) A noise reduction off and on switch shall be installed to permit the driver to shut off the [radio] *entertainment devices and all interior fan motors. This requirement applies to school vehicles constructed as of June 20, 2005.*

.24 Backup Warning Alarm.

An automatic *non-variable* audible alarm shall be installed behind the rear axle *and be at least 97 decibels.*

.26 Flooring and Floor Covering.

A. (text unchanged)

B. Floor covering in the aisle and steps shall be one continuous piece of fire-resistant, nonskid, wear-resistant, [ribbed] rubber. The minimum overall thickness shall be 0.1875 inch [measured from tops of ribs]. There shall be a heavy-duty, white-nosed, rubber wear plate where floor covering meets steps.

C. (text unchanged)

.28 [Defroster-Defogger] Defogger, Auxiliary.

One 6-inch auxiliary top mount fan shall be installed for window defogging. This fan is not to be considered a defroster.

.29 Mirrors.

A. (text unchanged)

B. Two *adjustable* exterior, clear view mirrors, with black housing, shall be installed on each side of the vehicle. [Mirrors with only an adjustable head may not be accepted.]

C. (text unchanged)

.31 Seats, Crash Barriers, and Interior.

A. Passenger Seats.

(1) — (4) (text unchanged)

(5) Seats shall be:

[forward] (a) *Forward* facing and shall be securely fastened with bolts and nuts to supporting parts of the vehicle. Each leg shall be fastened with a minimum of two bolts and nuts. Portable seats are not acceptable. Aisles between forward facing seats shall have a minimum clear width of 12 inches[.]; and

(b) *As of January 1, 2014, all vehicles procured for use in this State shall be constructed with materials that enable it to meet all the criteria of the school bus seat upholstery fire block test established by the National School Transportation Specifications and Procedures adopted at the most recent National Congress on School Transportation.*

(6) (text unchanged)

(7) The rear davenport paneling shall be covered with fireblock upholstery or have fireblock material between the engine compartment and the passenger compartment, and the seat on rear engine busses shall be covered with fireblock upholstery. *As of January 1, 2014, all vehicles procured for use in this State shall be constructed with materials that enable it to meet all the criteria of the school bus seat upholstery fire block test established by the National School Transportation Specifications and Procedures adopted at the most recent National Congress on School Transportation.*

(8) (text unchanged)

B. (text unchanged)

C. Operator's Seat.

(1) (text unchanged)

(2) The operator's seat shall:

(a) — (c) (text unchanged)

(d) *Be covered with Fire-Block material. As of January 1, 2014, all vehicles procured for use in this State shall be constructed with materials that enable it to meet all the criteria of the school bus seat upholstery fire block test established by the National School Transportation Specifications and Procedures adopted at the most recent National Congress on School Transportation.*

D. Crash Barriers.

(1) — (2) (text unchanged)

(3) *Barriers shall be covered with Fire-Block material. As of January 1, 2014, all vehicles procured for use in this State shall be constructed with materials that enable it to meet all the criteria of the school bus seat upholstery fire block test established by the National School Transportation Specifications and Procedures adopted at the most recent National Congress on School Transportation.*

E. — G. (text unchanged)

.32 Service Doors, Emergency Windows, Doors, and Exits.

A. (text unchanged)

B. Emergency Door.

(1) An emergency door shall be located in the rear and near the center. If the engine is so located as to prevent a rear emergency door or exit location, the emergency door shall be in the left side of the rear half of the bus and shall be clearly marked "EMERGENCY DOOR" in letters *at least 2 inches high at the top of, or directly above, the door on both the inside and the outside. If the outside areas above the door or the upper door window are not large enough for the words, the words may be placed on the door under the upper window.* An arrow at least 6 inches in length and 3/4 of an inch in width indicating the direction the release mechanism should be turned to open the emergency door shall be painted black on the inside of the emergency door.

(2) (text unchanged)

(3) The passage to the emergency door shall be kept clear of obstructions. For rear doors, the horizontal clearance of 24 inches shall be maintained for a distance of at least 12 inches inside the bus. When the emergency door is in the left side, a minimum horizontal clearance of [24 inches] *12 inches* and a vertical clearance of 48 inches shall be maintained between it and the center aisle. An emergency door head pad, a minimum of 1 inch by 4 inches of foam rubber, shall be installed on the interior of the vehicle to extend the width of the door opening.

(4) — (8) (text unchanged)

C. Emergency Windows.

(1) [The words "Emergency Exit" shall be in letters at least 2 inches in height above the window on the inside and above or below on the outside of the vehicle] *Side emergency windows shall be labeled "EMERGENCY EXIT" in letters at least 2 inches high located directly above the emergency exit on both the inside and outside surfaces of the bus.*

(2) A distinctive audible signal, automatically operated, shall clearly indicate to the seated driver when the engine is running the unlatching of [the rear] *any* emergency window. A cut-off switch, except through the ignition switch, may not be installed in the circuit.

(3) (text unchanged)

(4) [Each of these windows shall be labeled "EMERGENCY EXIT" in letters 2 inches high, located at the top or directly above the emergency exit on both the inside and outside surfaces of the bus.] *The words "Emergency Exit" shall be in letters at least 2 inches high above a rear exit window on the inside and above or below the window on the outside of the vehicle.*

D. Operating Instructions.

- (1) Concise operating instructions describing the motions necessary to unlatch and open the emergency window shall be:
(a) Of a color that contrasts with the letters background; and
(b) Located within 6 inches of the release mechanism on the inside surface of the vehicle.

[5] (c) A decal containing the precise operating instructions may be placed on [the] any Emergency Exit window. The decal shall be transparent except for the lettering.

[D.] E. Roof Vent/Emergency Exit. At least one roof vent/emergency exit shall be installed and be:

- (1) (text unchanged)
(2) Equipped with a release handle inside and outside to permit the ventilator cover to hinge open for emergency exit; [and]
(3) Labeled "EMERGENCY EXIT" in letters at least 2 inches high on the inside and outside of the vehicle followed by precise operating instructions[.] ; and
(4) Roof vents may be equipped with a distinctive audible signal.

.33 Step-Well Service Door.

A. (text unchanged)

B. The surface of steps shall be completely covered with a nonskid material having 1-1/2-inch white nosing, fire-resistant, nonskid wear-resistant, and [ribbed] rubber step treads, which shall have a minimum overall thickness of 0.1875 inch [measured from the tops of the ribs].

C. — E. (text unchanged)

Chapter 03 Type II School Vehicles — Construction Standards

Authority: Transportation Article, §§11-174, 12-104(b), and 25-110; Education Article, §7-808, Annotated Code of Maryland

.02 Incorporation by Reference.

A. (text unchanged)

B. Documents Incorporated.

- (1) — (24) (text unchanged)

(25) 49 CFR §571.302 Flammability of interior materials, as amended. *Repeal effective January 1, 2014 pursuant to Chapter 453, Acts of 2011.*

- (26) — (27) (text unchanged)

.08 Exhaust System.

A. The exhaust system shall include the:

- (1) (text unchanged)

(2) Piping leading from the flange of the exhaust manifold to and including the muffler or mufflers and [tail pipe or] exhaust pipes.

B. (text unchanged)

C.[Tail Pipes. Tail pipes] *Exhaust Pipes:*

(1) Shall be of nonflexible 16-gauge steel. *An Original Equipment Manufacture flexible pipe or its equivalent not longer than 24 inches in length may be used at the front of the system at or near the turbocharger;*

- (2) — (4) (text unchanged)

D. — H. (text unchanged)

.19 Color and Identification (Lettering).

A. (text unchanged)

B. Required Lettering.

- (1) — (2) (text unchanged)

(3) The words "EMERGENCY DOOR" or "EMERGENCY EXIT" in capital letters shall be 2 inches high [by 3/8 inch wide] painted above the door and above the emergency push-out windows, both inside and outside the vehicle.

- (4) — (7) (text unchanged)

C. (text unchanged)

D. Only signs and lettering approved by State law or regulation and any numbers necessary for identification shall appear on the vehicle. Bumper stickers [may not be applied] *are not permitted. The fleet number may be on the front bumper.*

E. *A vehicle titled and registered after April 2002 shall comply with all lettering size and location requirements.* If buses are repainted, they shall be relettered in compliance with this regulation.

F. — J. (text unchanged)

.23 Back-Up Warning Alarm.

An automatic *non-variable* audible alarm activated when the vehicle is in reverse shall be installed behind the rear axle *and be at least 97 decibels.*

.24 Emergency Equipment.

A. — D. (text unchanged)

E. Body Fluid Clean-Up Kit. Each bus shall have a removable and moisture-proof body fluid clean-up kit. The kit shall[:

- (1) Be properly mounted in the driver's compartment;
- (2) Be clearly labeled as a body fluid clean-up kit; and
- (3) At a minimum, contain the items listed below:
 - (a) Latex gloves, 2 pair;
 - (b) Mask;
 - (c) Absorbent powder;
 - (d) Antiseptic disinfectant, which may be incorporated in the absorbent powder;
 - (e) Antiseptic hand cleaner;
 - (f) Scraper;
 - (g) Paper towels;
 - (h) Two material bags with ties; and
 - (i) Directions for use]

F. (text unchanged)

.25 Flooring and Floor Covering.

A. (text unchanged)

B. Aisle and Step Areas.

(1) Floor covering in the aisle and steps shall be one continuous piece of fire resistant, nonskid, wear resistant, [ribbed] rubber, with a minimum overall thickness of 0.1875 inch [measured from the tops of the ribs].

(2) (text unchanged).

C. (text unchanged)

.26 Interior Heaters.

A. — H. (text unchanged)

.28 Mirrors.

[Interior Rear View Mirror. An interior clear rear view mirror shall be provided which shall:

A. Be at least 5 inches by 15 inches to afford a good view of the passengers and the roadway to the rear;

B. Be metal backed and framed, and made of laminated safety glass; and

C. Have rounded corners and protected edges.] A. *An interior clear view mirror shall be at least 5 by 15 inches to afford a good view of the passengers and the roadway to the rear. If it is not metal backed and framed, the mirror shall be made of laminated safety glass. It shall have rounded corners and protected edges.*

B. *Two adjustable exterior, clear view mirrors, framed with black housing, shall be installed on each side of the vehicle.*

C. *Fender-Mounted Mirrors.*

(1) *One fender-mounted tripod or solid piece mirror bracket shall be mounted on each front fender.*

(2) *An exterior convex mirror shall be mounted on each front fender to provide a close infield of the vision to eliminate blind spots.*

(3) *A single mirror of a type approved by the Administration in conjunction with the State Department of Education may be used in place of the mirrors in §C(2) of this regulation.*

.29 Seats, Crash Barriers, and Interior.

A. Passenger Seats.

(1) — (7) (texted unchanged)

(8) [Seat padding and covering shall be of a fire-resistant material which does not flash or explode upon contact with a spark or fire.] *As of January 1, 2014, all vehicles procured for use in this State shall be constructed with materials that enable it to meet all the criteria of the school bus seat upholstery fire block test established by the National School Transportation Specifications and Procedures adopted at the most recent National Congress on School Transportation.*

(9) — (10) (text unchanged)

B. (text unchanged)

C. Crash Barriers.

(1) — (2) (text unchanged)

(3) [Barriers shall be covered with fireblock material.] *As of January 1, 2014, all vehicles procured for use in this State shall be constructed with materials that enable it to meet all the criteria of the school bus seat upholstery fire block test established by the National School Transportation Specifications and Procedures adopted at the most recent National Congress on School Transportation.*

D. — F. (text unchanged)

.30 Service Door.

A. The service door shall:

(1) — (4) (text unchanged)

- (5) Be manually or power operated by the seated drive, *non-locking*; and
- (6) (text unchanged)

B. — I. (text unchanged)

.32 Emergency Exit Windows.

A. (text unchanged)

B. Operating Instructions.

(1) Concise operating instructions describing the motions necessary to unlatch and open the emergency window shall be:

- (a) [In letters at least 2 inches high and 3/8 inch wide;
- (b)] Of a color that contrasts with the letters' background; and
- [(c)] (*b*) Located within 6 inches of the release mechanism on the inside surface of the vehicle.

(2) (text unchanged)

C. The emergency window, if provided, shall be labeled "Emergency Exit" *in letters 2 inches high located* at the top of or directly above the emergency window on both the inside and outside surfaces of the vehicle.

.33 Roof Vent/Emergency Exit.

At least one roof vent/emergency exit shall be installed and be:

A. (text unchanged)

B. Equipped with a release handle inside and outside to permit the ventilator cover to hinge open for emergency exit; [and]

C. Labeled "Emergency Exit" followed by precise operating instructions; *and*

D. *Roof vents may be equipped with a distinctive audible alarm.*

.38 Windshields, Windows, Wipers, and Washers.

A. *Safety* Glass. Glass shall be installed so that the identification mark is legible.

B. — D. (text unchanged)

E. Windshield Wipers.

(1) (text unchanged)

(2) The windshield wiper blades and arms shall:

- (a) (text unchanged)
- (b) Be *at* least 14 inches long.

JOHN T. KUO

Administrator

Motor Vehicle Administration